

The Government's Strategic Direction on Uranium Development

Saskatchewan has over one billion pounds of identified uranium resources, second only to Australia, and has been mining uranium continuously for 56 years. The province is the world's leading uranium producer, accounting for one-fifth of global production.

The government established the Uranium Development Partnership (UDP) in October 2008, with a mandate to identify, evaluate, and make recommendations on Saskatchewan-based value-added opportunities to further develop the province's uranium industry. The UDP presented its report to government on March 31, 2009, in which it provided recommendations for capturing growth opportunities across the uranium value chain.

On April 8, 2009, the government announced the Future of Uranium in Saskatchewan Public Consultation Process. Dan Perrins, a long-time civil servant was appointed Chair of the Process, and was directed to lead an independent consultation process focused on the recommendations made by the UDP. Mr. Perrins was to document, and report to government what he heard from the people of Saskatchewan about the UDP's recommendations throughout the consultation process. Mr. Perrins submitted his report to government in mid-September 2009.

At the end of July, 2009, the Government of Saskatchewan in partnership with the University of Saskatchewan (U of S) submitted to the Government of Canada's Expert Review Panel on Medical Isotope Production a proposal to develop the Canadian Neutron Source (CNS) at the U of S to:

- supply medical isotopes to meet Canada's health care needs and for export; and
- provide neutron beams for Canadian neutron science research and industrial applications.

The proposal was in response to Natural Resources Canada's (NRCAN) Call for Expressions of Interest (EOI) to supply isotopes in the medium and long-term. The Expert Review Panel submitted its report to NRCAN at the end of November 2009. NRCAN will review the panel's report before making any decisions.

The government's general strategic direction on uranium includes:

- Actively supporting uranium mining and exploration;
- Encouraging investment in nuclear research, development and training opportunities, specifically in the areas of mining, neutron science, isotopes, small scale reactor design, and enrichment;
- Reserving decisions on supporting Saskatchewan communities interested in hosting nuclear waste management facilities to when such proposals are advanced in a regulatory process;
- Not endorsing Bruce Power's November 2008 proposal for a large scale nuclear power plant in Saskatchewan at this time, but encouraging the company to consider working with industry and government on opportunities that may arise from research into innovative reactor designs for implementation after 2020; and
- Directing SaskPower to continue including nuclear power in the range of sustainable energy options available for additional baseload generation capacity in the medium and long term after 2020. SaskPower's proposed options will be outlined in the strategy it is preparing as part of a fall Throne Speech commitment and will take into consideration the final report from the Standing Committee on Crown and Central Agencies on Saskatchewan's future power needs.

Summary of responses to the Uranium Development Partnership Report recommendations

The UDP Report, its executive summary and the report's recommendations can be found at www.saskuranium.ca.

UDP Recommendations on Exploration and Mining (Recommendations 1-7)

The government agrees with six of the UDP's seven recommendations in this area. It will examine its program incentives and competitiveness of its royalties, work with the federal government on a more thorough review of licence applications and on implementation of the recommendations of the federal competition policy review panel. It will work with industry on the infrastructure needed for new mine development. It is opposed to the UDP's recommendation on maintenance of the current physical claim staking system, given the investment already made in developing an electronic claim staking system.

UDP Recommendations on Upgrading (Recommendations 8-11)

The government agrees with all four of the UDP's recommendations in this area. It supports working with the federal government to clarify the framework under which an enrichment facility could be established in the province. It agrees with targeting the next generation of enrichment technology (laser isotope separation) and talking to industry about conditions under which a commercial-scale facility could be attracted to Saskatchewan within 10 to 15 years. It retains the ability to pursue development with industry of either a conversion facility or a fuel fabrication facility, as market conditions allow.

UDP Recommendations on Power Generation (Recommendations 12 and 13)

The government agrees with the UDP's recommendation that nuclear should be considered in the province's long-range energy mix. It does not agree with the UDP's recommendation (#13) on how a long-range planning process should proceed. The government instead supports the long-range planning that SaskPower is currently undertaking on electrical needs in the post 2020 period.

It is in this context that the government is not supporting Bruce Power's proposal for a large scale nuclear power plant at this time. Based on SaskPower's current demand forecast and power generation strategy and the options available, the government cannot support the addition of 1,000 megawatts as proposed from a single nuclear reactor.

UDP Recommendations on Used Fuel Management (Recommendations 14-16)

The government generally supports the three recommendations in this area. It still reserves decisions and its options around a geological repository for nuclear waste and communities that might want to host such a facility, while acknowledging the Nuclear Waste Management Organization's consultation and siting process in this regard. It agrees with not pursuing PUREX (plutonium and uranium recovery extraction) and MOX (mixed oxide fuel containing plutonium) reprocessing facilities at this time.

UDP Recommendations on Research, Development and Training (Recommendations 17-20)

The government agrees with all four recommendations in this area, supporting the concept of a nuclear research centre of excellence and expanded mining and exploration programs at academic institutions. It supports determining investment priorities in targeted areas of nuclear research and in partnering with the federal government on a research reactor that would produce medical isotopes.

Responses to the Recommendations from the Future of Uranium Public Consultation Process (The “Perrins Report”)

The Perrins Report and its recommendations can be found at www.saskuranium.ca.

The government agrees with the general recommendation from the report on public consultations that additional information and consultation are required around any future decision to pursue nuclear power. At the same time, it acknowledges that significant consultation has already occurred and is occurring, not only through the recent public consultation process, but also in connection with earlier uranium mining decisions, through regular public polling and surveying and through the work of the Standing Committee on Crown and Central Agencies.

The government believes the recommendations on special consultations with First Nations and Métis peoples are being addressed through the government’s efforts to develop a new First Nations and Métis Consultation Policy Framework.

Appendix: Government Responses to Each of the UDP Recommendations and to the Recommendations in the Perrins Report

The UDP Recommendations

UDP Recommendation 1: Maintain the current claim-staking system to provide a favourable environment for exploration.

Government Response: The Government of Saskatchewan does not support UDP Recommendation 1.

The government previously decided to adopt an electronic claim staking system consistent with other provinces.

This system is now being developed along with the appropriate legislative changes. It will mean greater efficiency for companies in registering land claims, and also encourage expenditures on the value added work of exploration for minerals.

UDP Recommendation 2: Work with the federal government to establish clear parameters and accountabilities for the duty to consult with First Nations and Métis communities.

Government Response: The Government of Saskatchewan supports UDP Recommendation 2.

This recommendation is already being addressed through the government's ongoing work to develop a new First Nations and Métis Consultation Policy Framework. The lead agency is the Ministry of First Nations and Métis Relations, with input from Energy and Resources and others. Input from First Nations and other key stakeholders is being factored in to the development of this framework.

We understand the federal government is developing its own interim guide on consultation, independent of our work here. Saskatchewan will certainly make every effort to ensure there is consistency and coordination in these initiatives.

UDP Recommendation 3: Examine the possibility of expanding its program incentives for exploration (e.g., flow-through shares, tax credits, and matching grants) to drive through-cycle investment decisions based on long-term uranium forecasts rather than spot prices.

Government Response: The Government of Saskatchewan supports UDP Recommendation 3, and has taken action in this regard for all industries within the mining sector, not just uranium.

The Saskatchewan Mineral Exploration Tax Credit was discontinued in 2006 but then re-enacted in November 2008, retroactively to April 2008.

In addition, in May 2009, the Government of Saskatchewan announced:

- the doubling of exploration credits for mineral dispositions until March 2011;
- the temporary elimination of the second and third year of rent for coal permits;
- the simplification of the grouping rules; and,
- the postponement of a proposed access fee.

UDP Recommendation 4: Undertake a review of the competitiveness of the royalty system in relation to other jurisdictions, with a focus on whether:

- The capital recovery bank correctly reflects the current cost of developing new projects in Saskatchewan.
- The royalty rate is sufficiently competitive and reflects the costs of extracting the resource.

Government Response: The Government of Saskatchewan supports UDP Recommendation 4. A review of the uranium royalty system will be undertaken over the next year.

The current uranium system was implemented on January 1, 2001.

Overall, the Ministry of Energy and Resources is pleased with how the system has operated but acknowledges it may be time to begin a full review of the system to ensure it remains competitive.

UDP Recommendation 5: Work with the federal government to establish clearer timelines and guidelines for a thorough, consistent, and predictable review of license applications.

Government Response: The Government of Saskatchewan supports UDP Recommendation 5.

Industry and provincial regulatory agencies have long identified the issue of regulatory delay as an added cost and uncertainty in development of new projects. A regulatory regime that does not account for objective cost benefit analysis of level of risk and defined environmental and safety targets creates uncertainty and delay for industry. The quality of a regulatory regime impacts project development in the province, which in turn has clear economic impacts.

The Council of Mines and Energy Ministers have previously identified this as a priority. Provincial and Territorial Ministers have been working with the Government of Canada to improve the efficiency and effectiveness of federal/provincial/territorial regulatory processes.

UDP Recommendation 6: Work with the federal government to ensure the recommendations of the Competition Policy Review Panel are implemented.

Government Response: The Government of Saskatchewan supports the intent of UDP Recommendation 6, although not the letter.

The Competition Review Panel has recommended conditional removal of the Non-Resident Ownership Policy (NROP).

We see no need for the removal to be conditional. We view this policy as a barrier to foreign investment in the province and have raised these concerns numerous times during its tenure. Saskatchewan has consistently advocated its elimination, not conditional removal.

UDP Recommendation 7: Work with industry to prioritize and facilitate the development of key infrastructure to create an environment favourable to new mine development.

Government Response: The Government of Saskatchewan supports UDP Recommendation 7.

For example, the Ministry of Highways is in the process of developing a comprehensive Northern Transportation Strategy which will fully support recommendation 7.

SaskPower has partnered with industry participants in the past to build transmission infrastructure in Northern Saskatchewan that supported uranium mining development in this remote area of the province.

UDP Recommendation 8: Work with the federal government to clarify the framework under which an enrichment facility could be established in the province in accordance with all international non-proliferation agreements and obligations.

Government Response: The Government of Saskatchewan supports UDP Recommendation 8.

Development or even implementation of enrichment technology is governed by international safeguard agreements as well as trade restrictions and barriers.

Given the safeguard and trade implications, the development of an enrichment opportunity will require participation of Saskatchewan, Canadian, U.S. governments and in certain cases other international cooperation.

UDP Recommendation 9: Target the next generation of enrichment technology (laser isotope separation) and enter into discussions with current technology developers to determine the conditions under which a commercial-scale facility could be attracted to the province within 10 to 15 years.

Government Response: The Government of Saskatchewan supports UDP Recommendation 9. The Government of Saskatchewan is open to working with potential investors on enrichment projects, with the hope that the investment climate may lead to an earlier timetable for new plants than articulated within the UDP report.

UDP Recommendation 10: Not proactively pursue the development of a conversion facility, given current market conditions.

Government Response: The Government of Saskatchewan supports UDP Recommendation 10.

However, we remain open to working with potential investors on conversion projects, with the hope that the investment climate may lead to an earlier timetable for new plants than articulated within the UDP report.

UDP Recommendation 11: Not proactively pursue the development of a fuel fabrication facility, given current market conditions.

Government Response: The Government of Saskatchewan supports UDP Recommendation 11.

We agree with UDP's assessment of current market conditions. However, the Government of Saskatchewan remains open to working with potential investors on fabrication projects in the event that the investment climate improves. This may lead to an earlier timetable for new plants than articulated within the UDP report.

UDP Recommendation 12: Include nuclear as part of the province's long-range energy mix given its cost-competitiveness as a baseload power alternative and economic value it would generate within the province.

Government Response: The Government of Saskatchewan supports UDP Recommendation 12.

A commitment was made in the fall 2009 Throne Speech to develop an electrical strategy that addresses the province's long-range energy mix for the post 2020 period.

SaskPower is directed to include nuclear power in its deliberations, as a technology option for meeting long-term needs. The eventual report from the Standing Committee on Crown and Central Agencies will be factored into the SaskPower electrical strategy.

UDP Recommendation 13: Begin this long-range planning process by:

- Laying out an overall process and timeline for new generation implementation.
- Considering the development, in coordination with Alberta, of a common power generation solution for the two Provinces by pooling their power needs and building stronger interties between the two provincial grids.
- Defining the role that the Provincial Government would play and developing a strategy to optimize the balance between expected power pricing and Saskatchewan ratepayers' exposure to cost overruns.
- Evaluating the type of grid, reserve, and intertie upgrades required under both a domestic and an export power generation scenario to meet growing electricity demand, independent of supply mix. Consider the implications of nuclear power generation on these infrastructure upgrades.

Government Response: The Government of Saskatchewan does not support UDP Recommendation 13.

This UDP recommendation provides for a sound regional planning approach that reflects a strong commitment to proceed with a large scale nuclear power plant.

The Government of Saskatchewan has decided against proceeding with a large scale nuclear power plant, as proposed by Bruce Power, at this time.

A commitment was made in the fall Throne Speech to develop an electrical strategy that addresses the province's long-range energy mix for the post-2020 period.

SaskPower is directed to include nuclear power in its deliberations as a technology option for meeting long-term needs. The pending report from the Standing Committee on Crown and Central Agencies will be factored into the SaskPower electrical strategy.

UDP Recommendation 14: Not proactively pursue the development of PUREX (plutonium and uranium recovery extraction) and MOX (mixed oxide fuel containing plutonium) reprocessing facilities in the short term. This position should be revisited if there is a significant change in federal policy regarding long-term fuel storage or the full cycle economics of reprocessing.

Government Response: The Government of Saskatchewan supports UDP Recommendation 14.

Canada's nuclear policy position does not allow for the development of plutonium reprocessing facilities in Canada, and instead supports the long term storage of used nuclear fuel on a "once through" basis.

UDP Recommendation 15: Support the NWMO consultation and siting process, given the potential benefits of a geological repository, while maintaining flexibility with regard to its ultimate participation.

Government Response: The Government of Saskatchewan supports UDP Recommendation 15.

Saskatchewan respects and supports the Nuclear Waste Management Organization (NWMO) consultation and siting process, Adaptive Phased Management for the long term care of used nuclear fuel.

This process has been adopted by the Government of Canada under the 2002 Nuclear Waste Act.

The Government of Saskatchewan has no intention of becoming a project developer of a nuclear waste management facility.

UDP Recommendation 16: Support any willing host community that comes forward through this process and, as appropriate, support the development of the deep geological repository in the context of a broader nuclear development strategy.

Government Response: The Government of Saskatchewan generally supports UDP Recommendation 16.

However, the Government of Saskatchewan reserves its decision to support any willing host community until a proposal has been developed and put forward within a regulatory process.

UDP Recommendation 17: Create and support a centre of excellence for nuclear research and training with a dual mission of:

- 1) supporting the existing nuclear industry in Saskatchewan; and,
- 2) developing a nuclear R&D program to support emerging opportunities, with a few focused areas of research on longer-term commercialization prospects.

Government Response: The Government of Saskatchewan supports UDP Recommendation 17.

Saskatchewan's submission has already gone forward to the Government of Canada. A centre of excellence for nuclear research and training is a central component of the Canadian Neutron Source proposal submitted to the Expert Review Panel on Medical Isotope Production. This was a joint submission by the government and the University of Saskatchewan.

UDP Recommendation 18: Under the first part of this mission (i.e. Rec. #17), expand existing:

- Mining and exploration programs at universities, colleges, and training schools to train engineers, geoscientists, and other mining specialists and to develop innovation through research in the earth, environmental, engineering, and social sciences relevant to the exploration and mining sectors.
- Nuclear engineering and physics programs at universities and establish training facilities to help prepare students for the CNSC (Canadian Nuclear Safety Commission) nuclear operator examination.

Government Response: The Government of Saskatchewan supports UDP Recommendation 18.

Training and development of future workers for our nuclear industry is an integral part of such a centre of excellence, including for mining uranium.

Training for other nuclear related areas can proceed with growth in Saskatchewan nuclear activity.

UDP Recommendation 19: Under the second part of this mission (i.e. Rec #17), form a group of experts to determine investment priorities in a few targeted areas of nuclear research. This group should review the most promising areas of research based on the type of skills and infrastructure required, the investment necessary to be competitive, the potential for private funding, and the prospect for commercialization. Areas to be considered by this group include, but are not limited to, small reactors and advanced fuel cycle technologies.

Government Response: The Government of Saskatchewan supports UDP Recommendation 19.

Development of research programs for nuclear medicine and neutron science will be done in partnership with the university community and other research centres, as would programs for designs of advanced small reactors.

UDP Recommendation 20: Partner with the federal government to pursue the construction of a research reactor in the Province as a complement to synergies with existing infrastructure capabilities, and to better position the province to participate in multiple areas of study. Pursue medical isotope production as part of the reactor's mandate.

Government Response: The Government of Saskatchewan supports UDP Recommendation 20.

On July 31, 2009 the Government of Saskatchewan, in partnership with the University of Saskatchewan, submitted a joint proposal entitled "Canadian Neutron Source" to the Expert Review Panel on Medical Isotope Production established by federal Natural Resources Minister Lisa Raitt.

The proposal will secure medical isotope production and reclaim for Saskatchewan its former leading-edge role in nuclear science.

The expert panel has endorsed the approach proposed by Saskatchewan, but not the Saskatchewan proposal explicitly:

"We recommend that the government expeditiously engage in the replacement of the [National Research Universal] reactor as we believe a multipurpose research reactor represents the best primary option to create a sustainable source of [the isotope

molybdenum 99], recognizing that the reactor's other missions would also play a role in justifying the costs," the report says.

Saskatchewan is cautiously optimistic that the Government of Canada will choose to endorse the Saskatchewan proposal and work with Saskatchewan to develop an appropriate sharing of costs between both levels of government. A decision is expected from the federal government in 2010.

Recommendations from the Perrins Report

Perrins Recommendation 1: I recommend the Government of Saskatchewan develop a consolidated report on all power generation options and make this report available to the public. This report should:

- Inform the public about the current and projected power needs of the province;
- Outline the power generation options being explored in other jurisdictions including Canada, Europe and the United States;
- Outline options for future power generation including: expanded use of renewables, with particular emphasis on wind and solar, but also hydro, geothermal, bio-mass and any other options;
 - expansion of natural gas and polygeneration, clean coal and carbon capture and sequestration;
 - nuclear power generation;
 - increased energy conservation efforts; and,
 - continued use of coal.
- Document the health, safety, environmental and economic considerations for each of the above options;
- Outline the costs associated with each of the options including initial capital investment, transmission costs, operating costs, the cost of storage for renewable sources such as solar or wind; costs associated with nuclear waste; and decommissioning costs;
- Provide a comparable projection of the estimated costs to the consumer for each of the options;
- Include a potential delivery discussion for each of the options including an expanded role for SaskPower and/or public-private partnerships; and,
- Explain the current global discussion regarding carbon taxation, cap and trade, and the implications of both.

Government Response: The Government of Saskatchewan accepts this as useful input.

A commitment was made in the Throne Speech that SaskPower would prepare an electrical strategy. The Standing Committee on Crown and Central Agencies is currently gathering input for a report on meeting Saskatchewan's future electrical needs. Its findings will be factored in to the SaskPower strategy. Our expectation is the end

result will address the various priorities identified by this particular recommendation in the Perrins Report.

Perrins Recommendation 2: I recommend SaskPower publicly release any existing analyses it has already undertaken regarding provincial power needs, the current state of its infrastructure, and future options for response.

Recognizing that there are limitations to what can be released publicly because of confidentiality and contractual obligations, and knowing that much technical information around power is difficult for non-experts to understand, this information should be in a format easily accessible to the public.

Government Response: The Government of Saskatchewan accepts this as useful input and has already complied.

In early 2008 SaskPower released all studies it had undertaken on nuclear power.

It will release its future electrical strategy to the public as well.

Perrins Recommendation 3: I recommend the Government of Saskatchewan commission a study to review the current research on the health impacts of nuclear power and that this study, and a publicly consumable summary version, be publicly released.

Government Response: The Government of Saskatchewan accepts this as useful input.

The Government of Saskatchewan agrees further provision of public information and consultation will be a necessary component on any future decisions to proceed with a nuclear power generation plant.

Perrins Recommendation 4: I recommend the Government of Saskatchewan initiate a public information campaign regarding the production and use of medical isotopes.

Information should answer the following questions:

- What are medical isotopes and what are they used for?
- How are they made?
- Who produces isotopes, what is their production status, what technology are they using and how much do they cost?
- What type of imaging technology is required in medical facilities, what is the availability of such technology and what are the costs?

- What is proven technology and what is emerging?
- What is the proposed Canadian Neutron Source, what will it produce, what technology will it use, what will it cost, and how is it similar or different from proposals submitted by other jurisdictions?

Government Response: The Government of Saskatchewan accepts this as useful input.

There will be further provision of public information and consultation as part of the regulatory proceedings to approve a new nuclear research reactor, if Saskatchewan's proposal is endorsed by the federal government.

Perrins Recommendation 5: I recommend that a separate First Nations consultation process be established for consultation and accommodation on any aspect of the uranium value chain, including the Uranium Development Partnership (UDP) report, in accordance with the unified First Nations Strategy on Consultation, Accommodation and Resource Revenue Sharing.

Government Response: The Government of Saskatchewan accepts this as useful input.

Report recommendations 5, 6, and 7 dealing with First Nations and Métis consultations are already being addressed through the government's ongoing work to develop a new First Nations and Métis Consultation Policy Framework.

Perrins Recommendation 6: I recommend a First Nations consultation process be established in the Athabasca Basin for consultation and accommodation on any aspect of the uranium value chain, including the UDP report, in accordance with the Athabasca Regional Government's An Agreement Respecting: a Protocol Establishing the Framework for the Crown's Duty to Consult and Accommodate, and A Resource Development Project Review and Approval Process.

Government Response: The Government of Saskatchewan accepts this as useful input.

Report recommendations 5, 6, and 7 dealing with First Nations and Métis consultations are already being addressed through the government's ongoing work to develop a new First Nations and Métis Consultation Policy Framework.

Perrins Recommendation 7: I recommend that a separate Métis consultation process be established for consultation and accommodation on any aspect of the uranium value chain, including the Uranium Development Partnership report.

Government Response: The Government of Saskatchewan accepts this as useful input.

Report recommendations 5, 6, and 7 dealing with First Nations and Métis consultations are already being addressed through the government's ongoing work to develop a new First Nations and Métis Consultation Policy Framework.

Perrins Recommendation 8: I recommend forums be organized on an ongoing basis to facilitate dialogue, debate, publication and information dissemination through the media. This should include, but not be limited to, the hosting of conferences, by the Government of Saskatchewan and the two universities to:

- Discuss nuclear generation, environmental health and community health; and,
- explore other options for future power generation including:
 - expanded use of renewables, with particular emphasis on wind and solar, but also hydro, geothermal, bio-mass, and any other options;
 - expansion of natural gas and polygeneration, clean coal, and carbon capture and sequestration;
 - increased energy conservation efforts; and,
 - continued use of coal.

Government Response: The Government of Saskatchewan accepts this as useful input.

In part, this recommendation is being addressed through the hearing process now underway of The Standing Committee on Crown and Central Agencies.

SaskPower's commitment to develop an electrical strategy in the October Speech from the Throne also is consistent with continuing a public dialogue on electrical energy issues.

It should also be noted a number of energy-related hearings and other public forums have been held over the years on these matters. There are an abundance of studies as well. At some point, decisions need to be made based on the best information available.

Perrins Recommendation 9: In order to make the best information available, I recommend the Government of Saskatchewan use mechanisms such as surveys, focus groups and polling on an ongoing basis to assess the knowledge, understanding, information needs and views of the public.

Government Response: The Government of Saskatchewan accepts this as useful input.

The Government of Saskatchewan agrees with the thrust of this recommendation, particularly in light of the report's caveat on page 36 "*...the responses summarized here are not necessarily representative of the Saskatchewan population and cannot be linked back to the population with any statistical reliability.*" For instance, recent independent polling has shown support for the nuclear industry. We will not close any doors where further sampling of public opinion is concerned.